

ProFX16 and ProFX22

The Mackie ProFX Series 4•Bus mixers include effects, graphic EQ and USB I/O all in one professional package.

The ProFX16 is a Professional 16-channel mixer with 10 mic preamps and four full stereo channels while the 22-channel ProFX22 comes with 16 mic preamps and four full stereo channels.

Each mic channel has an input Gain control with 50 dB of gain, a sharp 18 dB/octave, 100 Hz Low Cut filter, 3-band EQ (with mid-sweep on the mono channels), three Aux sends [two monitors and FX], Pan, Mute and a 60mm fader. There are dedicated inline compressors on the last four mono channels of each ProFX mixer and a Channel Insert jack for connecting an external processor on the remaining mono channels.

Additionally, the ProFX Series mixers include Mackie's classic high-headroom, low-noise mic preamps, integrated effects and a precision 7-band graphic EQ for tuning the room or the monitors.

The 32-bit RMFX™ processor has 16 "Gig-Ready" effects, including reverbs, choruses and delays. ProFX allows stereo playback from, and recording to, a computer via USB.

Other features include phantom power, a stereo tape input and output, a 1/4-inch stereo headphone jack, stereo 12-segment LED meters, XLR and TRS stereo output jacks and a footswitch jack to connect a remote control for muting the FX.



- Four dedicated inline compressors for critical inputs
- 32-bit RMFX™ processor with 16 "Gig-Ready" reverbs, choruses and delays
- Precision 7-band graphic EQ for tuning mains and monitors
- Stereo USB I/O for recording shows and music playback via Mac or PC
- 3-band EQ with sweepable midrange on mono channels
- Individual channel mute switches and overload (OL) indicators
- 18 dB/octave 100 Hz low cut filters on all mic channels
- Inserts on mono mic/line channels for connecting outboard processors
- 60mm faders for input channels, subgroups and mains
- 48V phantom power with LED
- FX mute button also controllable via footswitch
- Balanced XLR and balanced/unbalanced 1/4-inch main outputs
- Rack-mountable design using optional rack ears [ProFX16]
- Rugged steel chassis
- Switching multi-voltage power supply for worldwide use
- Includes Tracktion 3 Music Production Software for Mac or PC

APPLICATIONS

Live sound mixing, houses of worship, clubs, gymnasiums, banquet halls, conference rooms, boardrooms, studio and field recording, video post-production, multimedia applications, broadcast, and many, many more.

FEATURES:

- Professional 4•Bus live sound mixer with onboard effects and USB I/O
- Low-noise, high-headroom Mackie mic preamps with +50 dB gain range

ProFX16 and ProFX22 SPECIFICATIONS

Noise Characteristics

| | |
|---|----------|
| Equivalent Input Noise (EIN) (mic in to insert send out, 150 Ω source impedance, 20 Hz to 20 kHz) | |
| max gain | -128 dBu |
| Residual Output Noise | |
| All outputs, master levels off, all channel levels off | -95 dBu |
| All outputs, master levels unity, all channel levels off | -85 dBu |
| All outputs, master levels unity, one channel level unity | -85 dBu |

Equalization

| | |
|-----------------|-----------------------|
| Mono Channels | |
| Low | ±15 dB @ 80 Hz |
| Mid | ±15 dB |
| High | 100 Hz – 8 kHz |
| Low Cut Filter | ±15 dB @ 12 kHz |
| | 18 dB/octave @ 100 Hz |
| Stereo Channels | |
| Low | ±15 dB @ 80 Hz |
| Mid | ±15 dB @ 2.5 kHz |
| High | ±15 dB @ 12 kHz |

Frequency Response

| | |
|---|-----------------|
| Mic input to any output (gain at unity, +0 dB / -1 dB) | 20 Hz to 40 kHz |
|---|-----------------|

Maximum Voltage Gain (EQ Flat)

| | |
|------------------------------|-------|
| Mic input Channel to | |
| Insert Output | 50 dB |
| Tape Output | 60 dB |
| USB Output | 50 dB |
| 1/4" Main Output | 70 dB |
| XLR Main Output | 76 dB |
| Monitor Send | 85 dB |
| FX Send | 90 dB |
| Mono Line Input Channel to | |
| Insert Output | 30 dB |
| Tape Output | 40 dB |
| USB Output | 40 dB |
| XLR Main Output | 56 dB |
| Monitor Send | 65 dB |
| FX Send | 70 dB |
| Stereo Line Input Channel to | |
| Tape Output | 30 dB |
| USB Output | 30 dB |
| XLR Main Output | 46 dB |
| Monitor Send | 55 dB |
| FX Send | 60 dB |
| Tape Input to | |
| XLR Main Output | 36 dB |
| USB Input to | |
| XLR Main Output | 36 dB |
| Stereo Return to | |
| Mon Output | 30 dB |
| XLR Main Output | 26 dB |

Attenuation and Crosstalk

| | |
|--------------------------------------|---------|
| Adjacent Inputs, 1 kHz | -90 dB |
| Fader Off, 1 kHz | -75 dB |
| Mute Switch/Break Switch Mute, 1 kHz | -100 dB |

Common Mode Rejection Ratio (CMRR)

| | |
|-------------------------------------|-------|
| Mic In to Main Out, max gain, 1 kHz | 70 dB |
|-------------------------------------|-------|

Maximum Levels

| | |
|-------------------|---------|
| All inputs | +22 dBu |
| Main Mix XLR | +28 dBu |
| All other outputs | +22 dBu |

Impedances

| | |
|-----------------------|--------|
| Mic In | 3.3 kΩ |
| Channel Insert Return | 10 kΩ |
| All other inputs | 20 kΩ |
| Tape output | 1 kΩ |
| Phones output | 25 Ω |
| All other outputs | 120 Ω |

ProFX16 and ProFX22 SPECIFICATIONS continued...

Digital Effects

| | |
|-------------------|----------------------------|
| I/O | Mono input / Stereo output |
| Number of Presets | 16 |

Meters

| |
|--|
| Main L/R Mix |
| Two columns of 12 segments each: |
| OL (+20 dBu), +15, +10, +6, +3, 0 (0 dBu), -2, -4, -7, -10, -20, -30 |
| Channel OL LED |
| Measured post-EQ, pre-fader (-3 dB before channel clipping) |
| 18 dBu |

7 Band Graphic EQ

| | |
|---|-------------------------------|
| Frequency Centers | 125, 250, 500, 1k, 2k, 4k, 8k |
| Gain | ±15 dB |
| Assignable to Main or Monitor, bypassable | |

USB

| | |
|--------|------------------------------|
| Format | USB 1.1 |
| I/O | Stereo Input / Stereo Output |
| A/D/A | 16 Bit, 44.1 kHz / 48 kHz |

Phantom Power

| |
|------------------------------------|
| 48 VDC to all Mic channels at once |
|------------------------------------|

AC Power Requirements

| | |
|---------------------------|--|
| Power Consumption | 40 watts (ProFX16) 45 watts (ProFX22) |
| Universal AC Power Supply | 100 – 240 VAC, 50 – 60 Hz |
| Operating Temperature | 0° – 40°C 32° – 104°F |

Physical Properties (packaged product)

| | |
|-----------------|--|
| Height | 8.0 in / 203 mm (both) |
| Depth | 20.2 in / 513 mm (both) |
| Width | 21.6 in / 549 mm (ProFX16) 28.1 in / 714 mm (ProFX22) |
| Shipping Weight | 20 lb / 9.1 kg (ProFX16) 26 lb / 11.8 kg (ProFX22) |

Physical Properties (product)

| | |
|--------------|--|
| Front Height | 1.7 in / 44 mm (both) |
| Rear Height | 3.8 in / 97 mm (both) |
| Depth | 16.0 in / 407 mm (both) |
| Width | 18.7 in / 475 mm (ProFX16) 25.1 in / 639 mm (ProFX22) |
| Net Weight | 13 lb / 5.9 kg (ProFX16) 18 lb / 8.2 kg (ProFX22) |

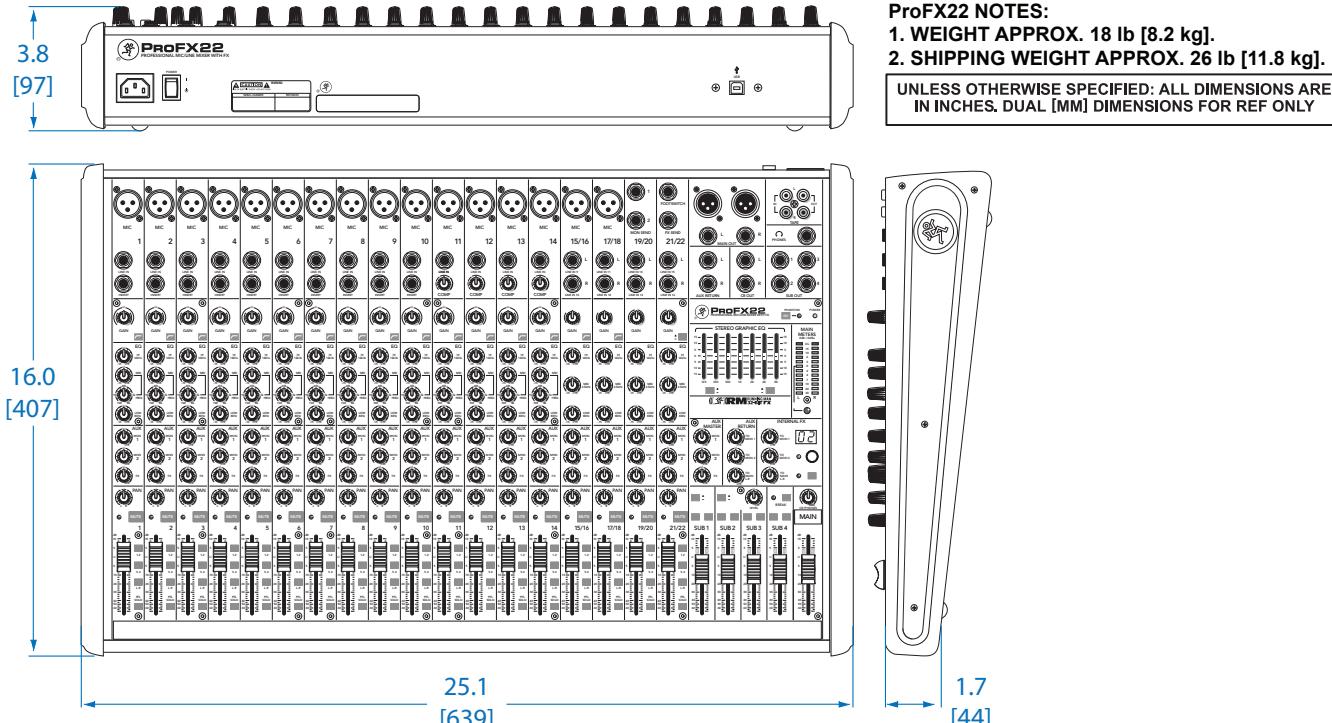
Options

| | |
|--------------------------|----------------|
| Rack Ear Kit for ProFX16 | P/N 2036168-00 |
| Mixer Bag for ProFX16 | P/N 2036809-10 |
| Mixer Bag for ProFX22 | P/N 2036809-11 |
| Mixer Cover for ProFX16 | P/N 2036809-12 |
| Mixer Cover for ProFX22 | P/N 2036809-13 |

Ordering Information

| | |
|---|----------------|
| ProFX16 Professional Effects Mixer with USB, US | P/N 2036015-00 |
| ProFX16 Professional Effects Mixer with USB, EU | P/N 2036015-01 |
| ProFX22 Professional Effects Mixer with USB, US | P/N 2036026-00 |
| ProFX22 Professional Effects Mixer with USB, EU | P/N 2036026-01 |

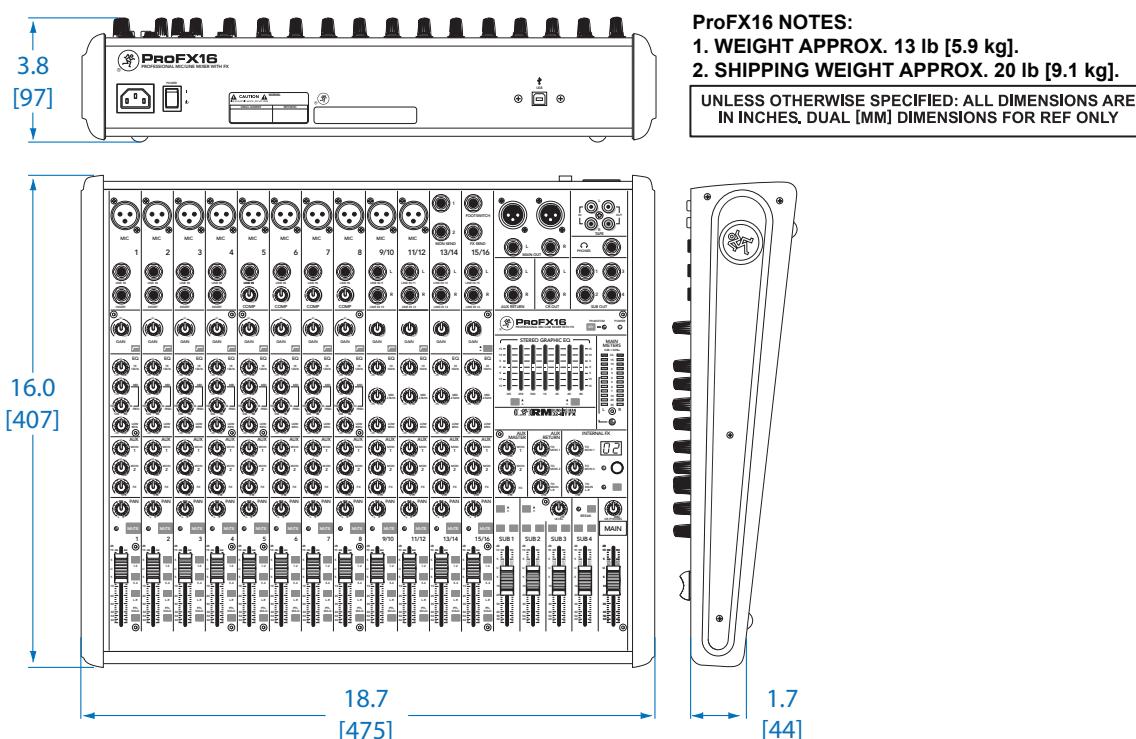
ProFX16 and ProFX22 DIMENSIONS



ProFX22 NOTES:

1. WEIGHT APPROX. 18 lb [8.2 kg].
2. SHIPPING WEIGHT APPROX. 26 lb [11.8 kg].

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. DUAL [MM] DIMENSIONS FOR REF ONLY

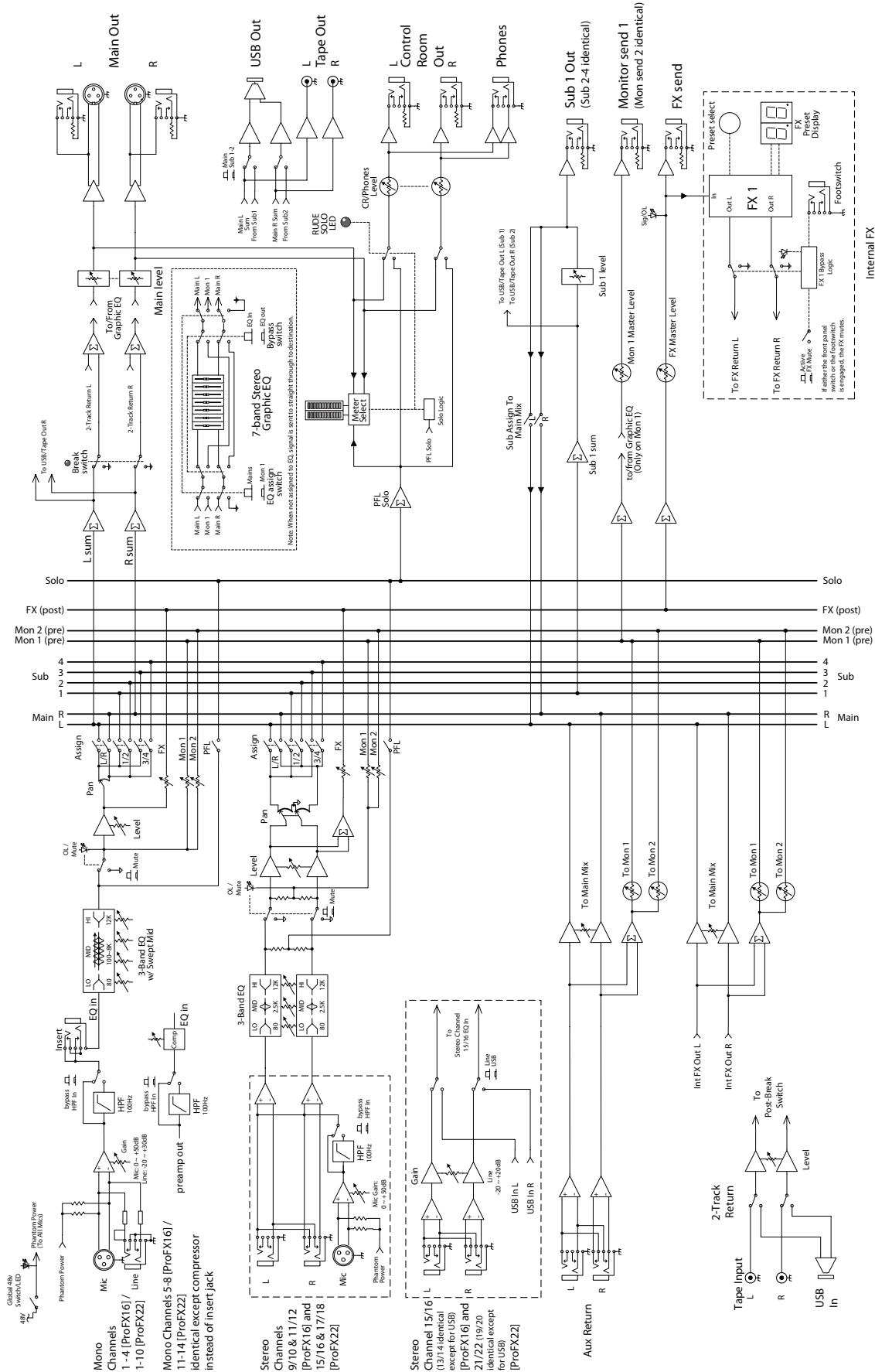


ProFX16 NOTES:

1. WEIGHT APPROX. 13 lb [5.9 kg].
2. SHIPPING WEIGHT APPROX. 20 lb [9.1 kg].

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. DUAL [MM] DIMENSIONS FOR REF ONLY

ProFX16 AND ProFX22 BLOCK DIAGRAM



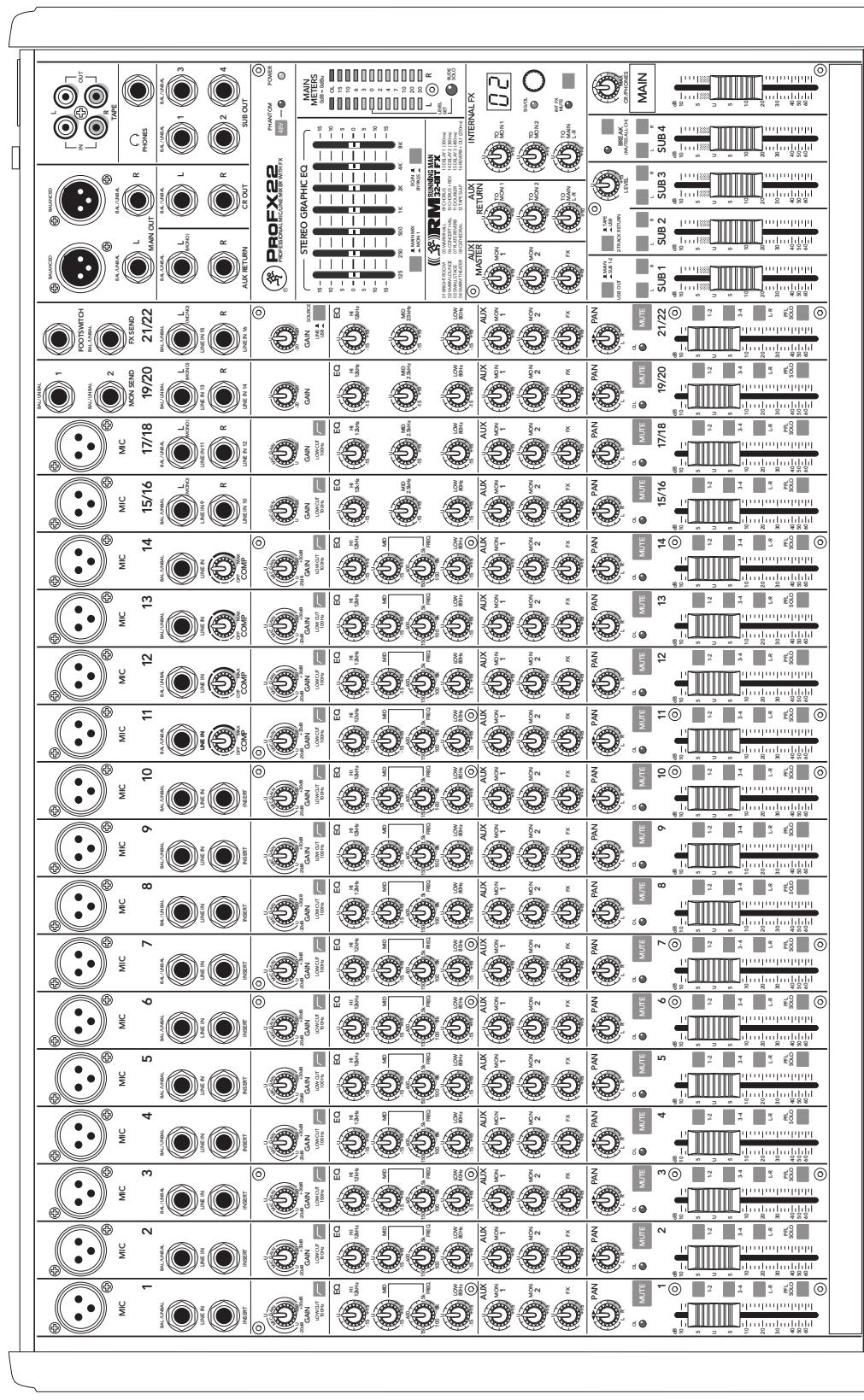
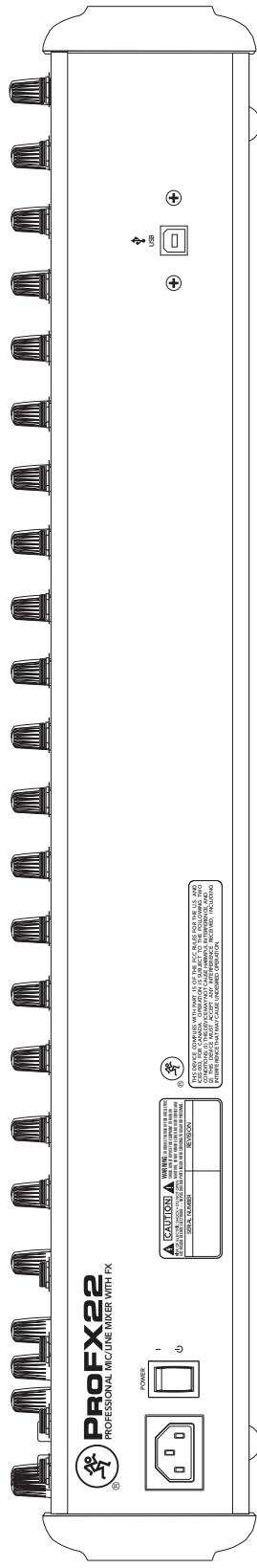
NOTE: Switches are shown in the default (out) position.

MACKIE®

ProFX16 and ProFX22

PROFESSIONAL EFFECTS MIXERS WITH USB

ProFX FRONT AND REAR PANELS (ProFX22 shown)



MACKIE®

ProFX16 and
ProFX22

PROFESSIONAL EFFECTS
MIXERS WITH USB

Electronic files for this product are available at:
www.mackie.com

Specification Sheet

PROFX16_22_SS.PDF

Owner's Manual

PROFX16_22_OM.PDF

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MACKIE®

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